Digital Rights and Intellectual Property

The invention of the internet has radically transformed our society from one that was driven by industrial might into one that is driven by information access. However, our intellectual property laws have not kept up with this transition. The reason for having intellectual property was originally created and is still, was to promote the growth of technologies and culture in a way that provides the maximum benefit to all individuals. This was setup in a manner that provided individuals exclusive rights to their intellectual property for a limited amount of time, ideally enough to make their investment worthwhile, and then to open the intellectual property up for the community to freely benefit from, transform, and build on top of.

(Keep reading the reasons for needing reform, or just skip down to the proposals)

This strategy worked very well from the pre-industrial revolution up until the last few decades. However, as the information revolution has moved forward, there have been several indicators that point to a need for this system to be brought up to speed.

Over the last several decades, there has been an incredible lobbying effort by large media corporations to the U.S. government that has been successful in pushing the term of copyright to extraordinary lengths of time so that these large media corporations can continue to make profit off of works that would otherwise become freely available to the public. However, this clearly undermines the entire idea behind intellectual property by limiting the public's access to it, even after the corporation has had a chance to make back its investment (the vast majority of the revenue from media is generated in the first 1-2 years). These great lengths need to be reigned in, to the benefit of the public.

With the rise to popularity of the internet also came the rise of individuals wanting to use the internet to share media with others. However, when networks arose to meet this desire, they were quickly branded as "pirates" even though they were of an explicitly non-commercial nature. The vast number of users of these networks makes it obvious that the public perception identifies non-commercial sharing of works either fundamentally ethical or at the very least not a wrong that is on the same level as commercial for-profit copyright violations. A balance needs to be found where non-commercial end users are not afraid to use the works that they legitimately have access to, and to use those works in their existing interactions with other people they have personal relationships with, while still respecting the rights afforded to copyright owners.

Additionally, under the guise of combating the popularity of sharing media over the internet, large media corporations have begun to apply technological locks to their media in the form of Digital Rights Management (DRM). DRM keeps users from transferring (or performing other fair-use acts with) media that they have legally obtained from one format (like a DVD) to another format (like a video file on an iPod), instead the companies force users to re-acquire the media (and pay more money) to see the same media in this new format. At the same time, all DRM if fundamentally flawed and all implementations to date have been broken. Thus these technological restrictions have not slowed the unauthorized transfer of media on the internet, but have punished those who have legally acquired media by forcing the to pay even more to use that media. This has also been expanded to encompass things like garaged door openers and ink-jet printers, which obviously needs to be addressed.

In the Intellectual Property realm of Patents, software patents are now being used widely, but do very little to encourage investment. Rather, they are often used to shut-out competition or for patent holding companies to try to get big settlements from big players such as Microsoft or RIM. In the end software patents are only benefiting a small group of people, who aren't even in the software development industry. Adding on to make this worse, is the fact that a software patent is really just a patent on a very complex mathematical formula or business method, not on a real invention, and many of the patents that are granted are for obvious and fundamental technologies which go to companies just because they are the first ones to think about the problem, not because they have made a great

breakthrough.

For both the copyright and patent issues, it is the lawyers that are the real winners. These have both become increasingly litigious. Law firms make hundreds of millions of dollars on Intellectual Property lawsuits, and that money is, in the end coming from the public. Obviously, spending millions of dollars and years of time arguing a intellectual property case isn't in the public's best interest.

In the end, the lawyers, patent trolls, and some media companies with out-dated business models are the ones who are benefiting from our current Intellectual Property laws, not the public. The following are some proposed reforms that would allow the public to be the real benefit of Intellectual Property, while keeping reasonable protections in place for legitimate businesses who wish to make a reasonable profit.

Software Patents

No patenting of processes that *can* be expressed completely in software. If something requires specific hardware to function, the hardware can be patented, but the patent does not apply to a software based implementation of the same functionality.

Examples of not patentable items:

- Amazon one click
- MPEG2 decoder software
- software defined radio that can talk 802.11N

Examples of patentable items:

- MPEG2 decoder card
- 802.11N Wifi card

Software Copyright

The copyright on any software file (executable file, compilable source file, intermediate file, script file, etc) will expire ten years after its original creation.
New versions with minor modifications can be created, and get a new ten years, but the original is not affected and will become public domain on the original schedule.
This copyright change will superseded any specific licensing agreement

Examples of software in the public domain:

- Source code created in the 1990s is now in the public domain
- Executables created in the 1990s are also in the public domain, and can be copied, de-compiled, etc
- MS Windows 95, NT 4
- SGI Unix
- Word 97
- Microsoft BOB
- Nintendo NES

General Copyright

The term of copyright will be reduced to thirty years from date of original creation for written works, video recordings, audio recordings, graphics, (others?). After thirty years, the work will be in the public domain.
The punitive damages for violating copyright will be limited to 40 times the fair market value for the work if the violation was commercial, and 4 times the fair market value for the work if the violation

was non-commercial.

Fair Use will supersede any specific licensing agreement and be explicitly defined to be:

- Creating copies for personal backup.
- Creating copies for personal use on mediums other than the one purchased or licensed on.
- Time shifting of streamed content.
- Use for educational purposes in a classroom (physical or online), for a school project, or as part of a peer-reviewed publication.
- For use as a substantial part of a parody or mashup.
- For use as a limited part in news reporting.
- Personal, Non-commercial sharing of content between individuals that have a personal relationship.

Acceptable use examples:

- Making a copy of the 1960 movie Psycho and making it available for download on your blog.
- Selling DVDs of the 1960 movie Psycho from your online or real-world store.
- Copying the movie Fight Club from a DVD to your computer.
- Copying the movie Fight Club from your computer to your iPhone.
- Copying the full text of a Washington Post story to your palm pilot.
- Making a recording of an episode of The Office on a TiVo as it is broadcast.
- Making a recording of the online stream of NPR's Science Friday on your computer.
- Copying an episode of The Office from your TiVo to your Zune player.
- Taking a fight scene clip from the movie Fight Club, changing the audio to be from the song Butterfly Kisses and posting the new creation to YouTube.
- Posting a six sentence excerpt from a Washington Post story to a blog along with comment about the story.
- Making a mix CD with the song Butterfly Kisses on it and giving it to your girlfriend.
- Sending the song Butterfly Kisses to your mother over instant messenger.
- E-mailing the full text of a Washington Post story to a person you met online and had been discussing politics with in an IRC chatroom.

Unacceptable use examples (NOT legal):

- Posting substantial clips from a recently released DVD to YouTube.
- Posting the full text of a Washington Post story to a blog.
- Making a recording of the online stream of NPR's Science Friday available as a download from your blog.
- Sharing the song Butterfly Kisses with the public on Kazaa.

Restrictions and Encumbrances

It shall be legal to break any technological barriers that limit the users ability to Fairly Use their content.

Any owner of physical hardware may use it in whatever way they desire. No license shall restrict the owner of equipment from operating it in the manner they desire.

Any research into these methods and production of tools to implement these methods shall as well be legal and protected from civil claims for such research.

Acceptable use examples:

- Removing the Content Scrambling System (CSS) from a DVD in order to copy it to a computer.
- Producing and selling a piece of software that removes the CSS from a DVD.
- Modifying the software on a TiVo box to send the recorded shows to your computer.
- Producing and selling a chip that can be plugged into a TiVo box that allows it to run modified software.

Service providers
As with the current provisions, if a service provider is issued a takedown notice for a piece of copyrighted content, it has a limited amount of time to remove it. If it follows this, it will be indemnified from any liability for content provided through its service.
Additionally, the service provider will now be able to make a determination that there is a reasonable likelihood that the takedown notice is invalid or that the work is a fair use, and if such a determination is made, does not need to remove the content to maintain its liability indemnification.
All providers of telecommunication services who do not control the content on their devices and networks would be completely indemnified and not subject to takedown notices, which must be submitted to the service provider.
Definition of service provider: The service provider is the entity that provides the service to the end user. In the case of content provided over the world-wide-web, the service provider (that any takedown notice must be submitted to) would be the owner of the web-page that the content was provided on.

Acceptable use examples:
- A user has posted a substantial clip from a recently released DVD to YouTube, the rights holder can send a takedown notice to YouTube, which must then take down the infringing content.
- A user has posted a video that they shot of a politician making a speech and posted it to YouTube, the other political party then sends a takedown notice to YouTube. YouTube can make the determination that there is a reasonable likelihood that the notice is invalid (since the opposing party is obviously not the rights-holder to the content), leave the content up, and still be indemnified should the clip eventually be found to be infringing.
- A user has posted a six sentence excerpt from a Washington Post story to a blog along with comment about the story. The Washington Post then sent the blog provider a takedown notice for this excerpt. The blog provider could make the determination that this is a fair use of the content (as it is a limited portion of the work and used for news reporting), and leave the post up and still be indemnified.

Not acceptable examples:
- AT&T Provides a fiber-optic line to an office that is illegally providing DVD movies online, and the rights holder sends a takedown notice to AT&T. As it is a telecommunication service, AT&T can not disconnect the customer based on a takedown notice, a court order would be required for this.